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| 10/829,386 | 04/22/2004 | Jong-tae An | 1793.1242 | 5413 |
| 21171 7590 04/17/2008 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | | |
| EXAMINER | | | | |
| HEYI, HENOK G | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/829,386

Applicant(s)

AN ET AL.

Examiner

HENOK G. HEYI

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,5,11,13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,6-10,12,14 and 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB006)
Paper No(s)/Mail Date 07/22/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Argument

Applicant's amendment to the claims have been accepted and examined further. However, applicant's argument on page 6, para 2 that states "Park at no point even mentions the terms "recess" or "recessed", nor does Park illustrate a recessed disc surface in Fig. 2B." is traversed. Even though, the terms "recess" or "recessed" are not found in the Park reference, it is obvious for one skilled in the art looking at figures 2B, 3B or 4B that the discs have recessed area for use of hindering generation and development of cracks. Looking at Fig. 4B more closely, one can see the taping member 17 that is placed on the recessed area in order to prevent generation and development of cracks near the center hole is level with the lead-in area of the recording area of the disc.

Allowable Subject Matter

1. The indicated allowability of claim 2, 4, 6, 7, 8, 9 and 10 is withdrawn in view of the same reference used in previous office actions.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2,4,6-10,12,14,16-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Park US 6,532, 210.

Regarding claim 4, Park teaches an optical disc (see Fig. 4A), for information recording and/or reproduction using light, having a center hole (10a, Fig. 4A), the disc is divided into a clamping area adjacent to the center hole (11, Fig), a data area in which data is recorded (13, Fig. 4A), and a lead-in area between the clamping area and the data area (an inherent feature of recording surface portion 13), the optical disc comprising: at least one sheet is attached to the clamping area to prevent generation and development of cracks near the center hole (the taping member 17 not only hinders a crack generated in the inner circumference of the center hole 10a from advancing to the outer side of the disc-type recording medium, but also prevents shearing and breakage, col 5 line 3-7), the clamping area being recessed such that a surface of the sheet attached to the clamping area is level with or lower than a surface of the lead-in area (see Fig. 4B).

Regarding claim 2, Park teaches the optical disc of claim 4, wherein the sheet has an annular shape (a plurality of annular taping members 17 can be disposed around the center hole 10a, col 5 line 1-2).

Regarding claim 6, Park teaches the optical disc of claim 4, wherein the sheet is of paper or other frictional flexible materials (fiber material having stability against shearing or breakage, col 4 line 60-65).

Regarding claim 7, Park teaches the optical disc of claim 4, wherein the sheet is attached to the clamping area using an adhesive or a double-sided tape (the annular

taping member may be adhered on the non-recording surface portion by an adhesive like bond, col 4 lines 65-67).

Regarding claim 8, Park teaches the optical disc of claim 4, wherein the clamping area is recessed by a depth equal to or greater than a thickness of the sheet (see Fig. 4B).

Regarding claim 9, Park teaches the optical disc of claim 4, wherein the sheet does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 10, Park teaches the optical disc of claim 8, wherein the sheet does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 14, Park teaches an optical disc (see Fig. 4A) having a center hole (10a), the disc is divided into a clamping area adjacent to the center hole (11, Fig), a data area in which data is recorded (13, Fig. 4A), and a lead-in area between the clamping area and the data area (an inherent feature of recording surface portion 13), the optical disc comprising: a material attached to a surface of the clamping area of the optical disc to prevent generation and development of cracks near the center hole (the taping member 17 not only hinders a crack generated in the inner circumference of the center hole 10a from advancing to the outer side of the disc-type recording medium, but also prevents shearing and breakage, col 5 line 3-7), the surface of the clamping area being recessed such that a surface of the sheet is level with or lower than a surface of the lead-in area (see Fig 4B).

Regarding claim 12, Park teaches the optical disc of claim 14, wherein the material has an annular shape (a plurality of annular taping members 17 can be disposed around the center hole 10a, col 5 line 1-2).

Regarding claim 16, Park teaches the optical disc of claim 14, wherein the material is paper or other frictional flexible materials (fiber material having stability against shearing or breakage, col 4 line 60-65).

Regarding claim 17, Park teaches the optical disc of claim 16, wherein the material is attached to the surrounding the center hole using an adhesive or a double-sided tape (the annular taping member may be adhered on the non-recording surface portion by an adhesive like bond, col 4 line 65-67).

Regarding claim 18, Park teaches the optical disc of claim 16, wherein the clamping area is recessed by a depth equal to or greater than a thickness of the material (see Fig. 4B).

Regarding claim 19, Park teaches the optical disc of claim 14, wherein the material does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 20, Park teaches the optical disc of claim 18, wherein the material does not protrude above a top surface of the optical disc (see fig 4B).

Regarding claim 21, Park teaches an optical disc (10, Fig. 4A) having a center hole (10a), a clamping area adjacent to the center hole (11), a data area in which data is recorded and a lead-in area between the clamping area and the data area(13), the optical disc comprising: at least one paper-like sheet attached to the clamping area and surrounding the center hole to prevent generation and development of cracks in the

Art Unit: 2627

optical disc (the taping member 17 is preferably made of a material different from the non-recording surface portion 11, such as a fiber material having stability against shearing or breakage, col 4 line 61-64) the clamping area being recessed such that a surface of the paper-like sheet attached to the clamping area is level with or lower than a surface of the lead in area (see Fig. 4B).

Regarding claim 22, Park teaches the optical disc of claim 21, wherein the paper-like sheet is made of paper (the taping member 17 is preferably made of a material different from the non-recording surface portion 11, such as a fiber material having stability against shearing or breakage, col 4 line 61-64).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Arakawa et al US 2003/0091781 A1 (Arakawa hereinafter).

Regarding claim 23, Park teaches the optical disc of claim 21, wherein the paper-like sheet which protrudes above the clamping area, but it doesn't explicitly teaches the height of the paper-like sheet which protrudes above the clamping area including a thickness of an adhesive applied thereto, may be no greater than 0.3mm. However, it is obvious for one skilled in the art that a disc with thickness of the standard 1.2mm should not have a clamp area with depth greater than 0.3mm. Arakawa also teaches adhesive layer to form the light transmitting protection layer (coating layer) of 0.1 mm thickness (see Arakawa para [0021]). The thickness of the crack hindering article, which is the annular sheet adhered in the recessed area in order to prevent generation and development of cracks near the center hole, does not have a patentable weight as Park has described although the preferred embodiments of the present invention have been described, it is understood that his invention should not be limited to the specified preferred embodiments but various changes and modifications can be made by one skilled in the art within the spirit and scope of his claimed invention (see col 6 line 14-20).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
March 14, 2008

HGH
Patent Examiner
03/03/2008